

# GIANT YELLOWKNIFE GOLD MINES LIMITED

(NO PERSONAL LIABILITY)

*Annual Report*

*For Year Ending May 31,  
1949*



# Giant Yellowknife Gold Mines Limited

(No Personal Liability)

25 King Street West, Toronto, Ontario

## NOTICE OF ANNUAL MEETING OF SHAREHOLDERS

TAKE NOTICE that the Annual Meeting of the Shareholders of Giant Yellowknife Gold Mines Limited (No Personal Liability) will be held at Private Dining Room No. 3, Royal York Hotel, Toronto, Ontario, on Thursday the 29th day of September, 1949, at the hour of 11:00 in the forenoon, Eastern Daylight Saving Time, for the purpose of:

(1) Receiving and approving the Report of the President, Financial Statements and Auditors' Report for the fiscal year ending May 31st, 1949, and the Report on Operations by the General Manager of the Company.

(2) Considering, and if deemed advisable, ratifying and confirming, with or without amendment, By-law Number 22 of the Company, enacted by the Directors on the 5th day of October, 1948, providing for a change in the fiscal year of the Company to end on the 31st day of May in each year, commencing with the year 1948.

(3) Considering, and if deemed advisable, ratifying and confirming, with or without amendment, a resolution of the Board of Directors passed on the 14th day of April, 1949, relating to certain existing options to personnel of the Management, Staff and Employees originally authorized under the provisions of By-law Number 19 of the Company, enacted in 1946, and providing for the re-allocation of part thereof and for the extension of the option date until the 1st day of May, 1950; the extension affecting an aggregate of 17,450 shares.

Further particulars are set out in the Proxy Statement herewith.

(4) Electing a Board of seven directors to hold office for the ensuing year.

(5) Appointing auditors for the ensuing year.

(6) Transacting such other business as may properly come before the meeting.

Enclosed herewith is a copy of the Report of the President, dated August 24th, 1949, and of the General Manager's Report, together with Financial Statements for the year ending May 31st, 1949, and Auditors' Report dated August 19th, 1949.

A copy of the above mentioned By-law Number 22 and Directors' Resolution may be inspected by any registered shareholder at the Head Office of the Company during usual business hours.

A shareholder who is unable to be present and who wishes to be represented at the meeting is entitled to be represented by proxy. The attached proxy is being solicited by the Management of the Company. A proxy statement is set out herewith. A reply addressed envelope is enclosed herewith for the purpose of the return of the proxy.

Dated at Toronto this 15th day of September, 1949.

By Order of the Board of Directors,

A. C. CALLOW,  
Secretary.



# PROXY STATEMENT

## General Information

The Management solicits your proxy for use at the Annual Meeting of Shareholders mentioned in the Notice of Annual Meeting of Shareholders. A form of proxy is attached. Any shareholder who executes and delivers the proxy may revoke it at any time prior to its use. The costs of soliciting the proxies will be borne by the Company.

Shareholders are referred to the President's Report mailed herewith, and to the financial statement referred to in the Notice for financial and other information about the business of the Company during the past fiscal year. At the meeting it is proposed to present a resolution for the acceptance and adoption of the Report of the President, Auditors' Report and Financial Statements, and Report of the General Manager, copies of all of which are enclosed herewith, and it is the intention of the persons named in the below proxy to vote in favour of such resolution; proxies received from shareholders with registered addresses in the United States of America will not be voted upon such resolution.

Holders of shares of the capital stock of the Company of record at the date of the meeting are entitled to vote on the election of Directors, the appointment of auditors and all other matters which properly come before an Annual Meeting of Shareholders. The number of shares outstanding as at August 1st, 1949, is 3,982,550.

## CONFIRMATION OF BY-LAW No. 22—FISCAL YEAR

By-Law Number 22 of the Company enacted by the Directors on the 5th day of October, 1948, changes the fiscal year end from June 30th to May 31st, effective as of May 31st, 1948.

The production stage was reached and the milling commenced during May, 1948, when the mill was tuned-up. For purposes related to exemption under Canadian income tax laws, and benefits under Canadian statutes granting emergency assistance to gold mines, the Company notified the appropriate authorities of the commencement of milling on a commercial scale on June 1st, 1948. Having regard to the transportation facilities serving the mine the end of May is the most suitable date for stocktaking and annual auditing. In view of these factors it was considered desirable that the fiscal year should be altered to terminate on the 31st day of May, commencing with the period ending May 31st, 1948. An affirmative vote of shareholders present or represented by proxy at the meeting and holding a majority of the issued capital stock represented is required to confirm this by-law. It is the intention of the persons named in the proxy herewith to vote in favour of confirmation of the by-law, unless contrary instructions are indicated on the form of proxy.

## ELECTION OF DIRECTORS

At the meeting a board of seven directors is to be elected for the ensuing year, and it is the intention of the persons named in the attached form of proxy to vote such proxy for the re-election of the present seven Directors of the Company whose term of office expires at the meeting. The names of the nominees, together with information about them, as furnished by the nominees themselves, is shown below. In case any of these nominees should become unavailable for election for any presently unforeseen reason, the persons named in the proxy will have the right to use their discretion to vote for a substitute.

Name and Principal Occupation	Year First Became a Director *	Shares Beneficially Owned as of August 1st, 1949
Thayer Lindsley <i>President, Ventures Limited (Mining and Exploration Company)</i>	1943	26,415 **
E. V. Jaeger <i>Financier, associated with Parrish &amp; Co., Members, New York Stock Exchange</i>	1943	50,468.79
Allan J. Anderson <i>Vice-President, Frobisher Limited, Toronto (Mining and Exploration Company)</i>	1945	1
Ralph Pielsticker <i>Financier</i>	1946	901



Name and Principal Occupation	Year First Became a Director *	Shares Beneficially Owned as of August 1st, 1949
A. Kelso Roberts, K.C. .... <i>Barrister &amp; Solicitor, Roberts, Archibald, Seagram &amp; Cole</i>	1947	400
J. Bradley Streit ..... <i>Partner, J. Bradley Streit &amp; Company, Members, Toronto Stock Exchange</i>	1948	3,127
W. M. Archibald ..... <i>President, Nevada Monarch Consolidated Mines, Inc.</i>	1948	20

\* Have served continuously since the year shown.

\*\* Mr. Lindsley also owns personally or through a private holding company 34.82% of the issued capital of Ventures Limited, which holds 54.21% of the issued capital of Frobisher Limited, referred to below.

The aggregate amounts (Note 1) paid or set aside by the Company during the last fiscal year to all persons as a group, who were directors or officers are as follows:

Group	Capacity in which remuneration was received	Salaries	Bonuses	Retirement Income Plan Payments
Directors	Salaries as officers	\$5,550 Note 3	Note 2	Nil
Officers not being Directors	Salaries as officers	\$4,060	Note 2	\$198.00
Total		<u>\$9,610</u>		<u>\$198.00</u>

Note 1. All dollar amounts shown in this Proxy Statement are in Canadian currency.

Note 2. In addition, subject to approval by Shareholders, options to purchase 10,100 shares of the capital stock of the company at Five Dollars (\$5.00) per share, originally authorized by By-law Number 19 of the Company, and later extended by the directors, were re-allocated amongst and granted to persons who are directors and/or officers and whose names are set out under the next heading below, where material provisions are referred to, and extended until May 1st, 1950. During the past fiscal year an officer of the Company in exercise of options authorized by By-law Number 19 as extended by the Board of Directors purchased 450 shares of the capital stock of the Company at \$5.00 per share, the market value at the date of purchase being \$6.10.

Note 3. Legal fees have been paid during the year to Mr. Roberts' firm as solicitors for the Company.

No officer, employee or other person received more than \$25,000.00 remuneration from the Company during the fiscal year.

None of the foregoing nominees has been or is proposed to be elected under any arrangement or understanding with any other person or persons except the directors of the Company acting solely in that capacity, except that, by virtue of the below mentioned agreement of June 4th, 1943, Frobisher Limited has the right to majority representation on the Board of Directors, and has nominated Messrs. Lindsley, Anderson, Roberts and Archibald.

Otherwise than as aforesaid, none of the Directors or Officers or their associates had any material interest, direct or indirect, in any significant transactions since the beginning of the last fiscal year of the Company, except that Frobisher Limited, of Toronto, is an affiliate, as at August 1st, 1949, owning beneficially 28.19% of the outstanding shares, and controlling the right to vote an additional 28.75% approximately, which is owned by Yellowknife Bear Mines Limited. During the fiscal year Frobisher has exercised its right of management and direction of development of the mining properties of the Company acquired under agreement with the Company dated June 4th, 1943.

There are no other persons known to the Management to hold beneficially more than 10% of the outstanding capital stock of the Company.



## RATIFICATION OF EXTENSION OF STOCK OPTIONS TO MANAGEMENT, ETC.

Under the provisions of By-law No. 19, confirmed by the Shareholders in 1946, 35,000 shares of par value \$1.00 of the capital stock of the Company were optioned at \$5.00 per share to certain personnel of the management, staff and employees of the Company, until April 30th, 1948, and on terms set out in the By-law. On April 30th, 1948, the Board of Directors of the Company, considering that the mine had not then reached the production stage, and that the factors and considerations leading to the original granting of the options still pertained, and deeming it to be in the interests of the Company and its personnel, and acting within the powers of the Board as advised by Counsel, extended the remaining options authorized for one year; the market price then was \$4.45, and the number of shares effected was 32,750. No director or officer was named in such extension resolution to receive any options nor has exercised any, other than J. C. Rix, treasurer, 450 shares. 15,300 shares were purchased in exercise of such extended options on or before April 30th, 1949. The By-law and extension resolution provided that the Board and President should have the right to re-allocate amongst members of the management, staff and employees, including directors, options which might become forfeited by reason of death, termination of employment or otherwise.

As of April 14th, 1949, options on 10,350 shares had lapsed and options on 19,275 further shares remained unexercised. On that date the Board of Directors of the Company, considering an extension to be in the interests of the Company, and without added consideration, passed a resolution re-allocating lapsed options on the said 10,350 shares and extending all unexercised options upon terms similar to those of the original by-law and extending resolution, for one year from April 30th, 1949. As such resolution involves benefits to the directors and officers it expressly provides that options granted, re-allocated or extended beyond April 30th, 1949, are not to be exercisable prior to the conclusion of the annual meeting of the company, and shall be subject to ratification thereat. A majority vote of the meeting is required for ratification, failing which the resolution is ineffective to extend the options beyond April 30th, 1949. The closing market value quotations on The Toronto Stock Exchange were as follows: on April 14th, 1949, \$6.10; on August 2nd, 1949, \$6.75. The lapsed options, including an option on 8,750 shares to the former president, since deceased, were so re-allocated and granted as follows: to T. Lindsley, President and Director—5,275 shares; to A. J. Anderson, Vice-President and Director—4,425 shares; to A. C. Callow, Secretary—400 shares; to J. T. McWhirter, Accountant—250 shares. The aggregate number of optioned shares affected by the Directors' Resolution to be submitted for ratification is 17,450 shares. Persons holding more than five per cent (872) of such shares optioned are shown below. No other director or officer holds any options, the balance being held by four employees.

	Optioned Shares		Exercised
	Granted Originally	Granted on Re-allocation	
T. Lindsley, New York, President.....	nil	5,275	nil
A. J. Anderson, Toronto, Vice-President....	nil	4,425	nil
E. V. Neelands, Toronto.....	4,475	nil	nil
C. W. Dowsett, Toronto.....	1,000	nil	nil
A. C. Callow, Toronto, Secretary.....	600	400	600

It is the intention of the persons named in the proxy herewith to vote in favour of ratification of the Resolution unless contrary instructions are indicated on the form of proxy. There is no present intention of further extension or amendment by the Board of Directors, notwithstanding any powers in such respect, save re-allocation, as provided for in the resolution, of options that may lapse by reason of death, etc.

## APPOINTMENT OF AUDITORS

The Shareholders present in person or represented by proxy will be asked to vote for the re-appointment of Messrs. Gunn, Roberts and Co., Chartered Accountants of Toronto, the present auditors of the Company, and it is the intention of the persons named in the attached proxy form to vote in favour of the re-appointment of this firm. Under date of August 24th, 1949, Gunn, Roberts and Co. have advised the Company that neither their firm nor any of its partners or other associates has any material relationship with the Company or any of its affiliates except in the capacity of independent auditors of the Company and certain of its affiliates.

## OTHER MATTERS WHICH MAY COME BEFORE THE MEETING

The only business that the Management knows will be presented to the meeting is the business set out in the Notice.

If other matters properly come before the Meeting, it is the intention of the persons named in the attached form of proxy to vote the said proxy in accordance with their judgment in such matters.

By Order of the Board of Directors,

A. C. CALLOW,

Secretary.

15th September, 1949.



# Seventh Annual Report

## *Annual Meeting of Shareholders*

Thursday, September 29, 1949, at 11 a.m. (Toronto Time)  
Dining Room No. 3, Royal York Hotel,  
Toronto, Ontario.





ABOVE: No. 1 Camp showing new bunk houses and cafeteria under constuction in foreground and new staff house in the centre.

BELOW: Company residences for employees in Yellowknife Townsite.





# Giant Yellowknife Gold Mines Limited

(No Personal Liability)

## HEAD OFFICE:

25 King Street West, Toronto, Ontario

## MINE OFFICE:

Yellowknife, N.W.T.

## OFFICERS:

T. LINDSLEY  
President

J. C. RIX  
Treasurer

A. J. ANDERSON  
Vice-President

A. C. CALLOW  
Secretary

## DIRECTORS:

T. LINDSLEY  
R. PIELSTICKER

A. J. ANDERSON  
J. BRADLEY STREIT

A. K. ROBERTS, K.C.  
E. V. JAEGER

W. M. ARCHIBALD

A. K. MUIR  
General Manager

A. S. DADSON  
Consulting Geologist

E. V. NEELANDS  
Consulting Engineer

## TRANSFER AGENTS AND REGISTRARS:

THE STERLING TRUSTS CORPORATION  
372 Bay Street, Toronto 1

REGISTRAR AND TRANSFER COMPANY

2 Rector Street, New York 6, N.Y., U.S.A.  
15 Exchange Place, Jersey City 2, N.J.

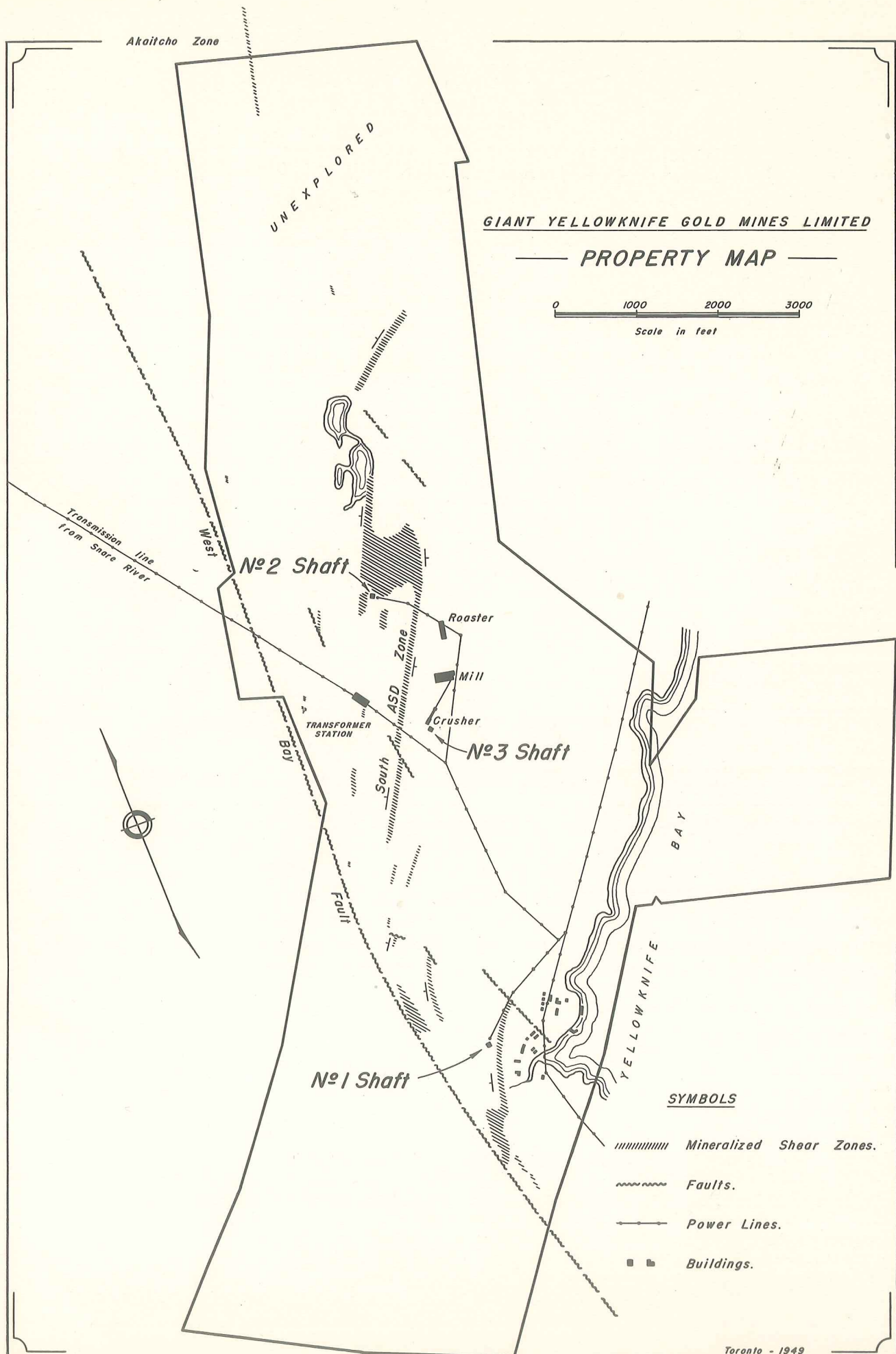
## AUDITORS:

GUNN, ROBERTS & COMPANY  
Toronto

## SOLICITORS:

ROBERTS, ARCHIBALD, SEAGRAM  
& COLE  
Toronto





Akaitcho Zone

UNEXPLORED

GIANT YELLOWKNIFE GOLD MINES LIMITED

PROPERTY MAP

0 1000 2000 3000  
Scale in feet

Transmission line  
from Snare River

West

No. 2 Shaft

Roaster

Mill

Crusher

No. 3 Shaft

TRANSFORMER  
STATION

Boat

South

Fault

No. 1 Shaft

BAY

YELLOWKNIFE

SYMBOLS

- Mineralized Shear Zones.
- Faults.
- Power Lines.
- Buildings.

# Giant Yellowknife Gold Mines Limited

(No Personal Liability)

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## REPORT OF THE PRESIDENT

Toronto, Ontario,

August 24th, 1949.

To the Shareholders,  
Giant Yellowknife Gold Mines Limited.

Your Directors respectfully submit for your consideration the Annual Report of your Company for the year ending May 31st, 1949. A Report by the General Manager, and a Balance Sheet with Statement of Operations, are included.

Your Company has now completed the first full year of production, with gratifying results considering the low tonnage the plant treated. It will be noted on the Balance Sheet that bank loans were reduced to a total of \$982,791.62 at May 31st—a reduction of approximately \$659,000 from the maximum loan of \$1,641,000 reached in March. During June, 1949, the bank loan arranged for construction of the transmission line was repaid and the operating loan was reduced by approximately \$90,000. It is appropriate here to record the importance to the Company's operation of this substantial bank credit, particularly as it was originally provided prior to the commencement of production.

Early in February the roaster and cyanide sections of the Treatment Plant were completed. Prior to this time flotation concentrates had been stockpiled, and subsequent to this date the roaster became the controlling factor in tonnage treated. Current production had provided approximately 45% of the roaster feed and stockpiled concentrates 55%. Approximately 14,000 ounces of recoverable gold remained in the concentrate stockpile at the end of the year, and it is expected that this will be completely treated by October. As you will note in the General Manager's Report, overall extraction obtained has reached the figure indicated by laboratory test work. Further research is being carried on, and it is anticipated that improvement in the metallurgy of this ore will be achieved.

Underground development has been confined to No. 2 Shaft workings and some exceptional ore has been opened up on the North end of the 3rd Level. A new broad scale program of developing the central and south areas and deeper development of the north area has been laid out. The first move in this direction will be the sinking of the No. 3 Shaft located adjacent to the Crusher Plant. This will permit extraction of ore from many more working places.

Your Consulting Geologist, Dr. A. S. Dadson, prepared a report on the mine, which was sent to shareholders under date of June 4th. This report describes the property and the proposed plan of development and was intended to give the shareholders a full understanding of all geological information now available.



Hydro-electric power became available in October last from the Snare River Plant of the Northwest Territories Power Commission, an agency of the Dominion Government. The transmission system for this project, which was under contract and financed by your Company, was taken over on a cost basis by the Power Commission. Interim payments were made during the later stages of construction and final payment was received in May, 1949. A contract was entered into with the Commission for the supply of power on a long-term basis in anticipation of the expanding operations of the Company.

Now that we have completed the first year of production, our efforts will be concentrated on developing the mine to the size of operation justified by the ore occurrences and geological features prevailing, and at the same time to increase efficiency and effectiveness of our effort to the end where costs will be lowered, thereby increasing the overall mine potential. Your mine stands out as one of the major gold mining operations developed in recent years on the North American Continent.

Your management deserves great credit for what has been accomplished under difficult conditions during the first year of operation and your Directors take pleasure in expressing their thanks to your General Manager, Mr. A. K. Muir, his staff and employees.

On Behalf of the Board,

T. LINDSLEY,  
President.



# Giant Yellowknife Gold Mines Limited

(No Personal Liability)

## STATEMENT OF OPERATIONS

for the year ended May 31, 1949

### Metal Sales:

Gold	42,561.834 ozs.		\$ 1,489,664.23	
Silver	16,473.11 "		11,818.71	\$ 1,501,482.94

### Deduct:

Metals recovered from concentrates on hand at June 1, 1948	49,010.00			
Marketing expenses	15,132.45	64,142.45	\$ 1,437,340.49	

### Add:

Estimated assistance under The Emergency Gold Mining Assistance Act			511,019.77	
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\$ 1,948,360.26

### Add:

Concentrates on hand at May 31, 1949, valued at applicable portion of operating expenses and write-offs			525,000.00	
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\$ 2,473,360.26

### Operating Expenses:

Surface exploration		29,077.68		
Current mine development		187,737.04		
Stope preparation		194,507.73		
Stoping		224,246.96		
Milling and roasting		405,372.96		
Power contracted for but not used	\$37,336.68			
Less portion distributed to operating costs	21,615.13	15,721.55		
Engineering, geological, warehousing, supervision and mine office expenses		117,170.48		
General expenses at the property		157,490.54		
Administrative and corporate expenses		67,301.84		
Interest on loans		68,506.75	1,467,133.53	

Net Operating Profit before write-offs \$ 1,006,226.73

Depreciation of buildings, machinery and equipment	\$ 512,917.32			
Amortization of preproduction expenses	324,258.98			
Amortization of shaft sinking expenses	8,288.60	845,464.90		

Net Operating Profit \$ 160,761.83

Miscellaneous income 6,790.34

Net Profit \$ 167,552.17

Note: The Company is exempt from Dominion income taxes for the year ended May 31, 1949, under Section 74 of The Income Tax Act.



# GIANT YELLOWKNIFE GOLD MINING

(NO PERSONAL)

## Balance Sheet — 1949

### ASSETS

#### Current Assets:

Cash on hand and on deposit .....	\$	12,202.09	
Gold and silver on hand and in transit .....		265,962.15	
Government bonds on deposit with Northwest Territories Power Commission at cost (market value \$39,600.00) ....		39,850.00	
Accounts receivable .....		24,392.14	
Accrued interest receivable .....		611.54	
Estimated amount receivable under The Emergency Gold Mining Assistance Act .....		290,000.00	
Concentrates on hand valued at applicable portion of operating expenses and write-offs which is less than estimated net recoverable value .....		525,000.00	\$ 1,158,017.92

#### Construction Supplies and Mine Stores at Cost:

On hand .....	602,682.84	
In transit .....	316,975.19	919,658.03

#### Fixed Assets:

Mining claims acquired:			
For 1,200,000 shares issued at par .....	\$ 1,200,000.00		
For cash .....	500.00	1,200,500.00	
Buildings, machinery and equipment .....	3,406,881.37		
Less depreciation provided to date .....	512,917.32	2,893,964.05	4,094,464.05

Sundry Investments at Cost or Less ..... 26,501.26

#### Expenditures Deferred to Future Operations and Other

Assets:			
Preproduction expenses .....	2,161,726.50		
Less amortized to date .....	324,258.98	1,837,467.52	
Deferred shaft sinking expenditures .....	55,257.32		
Less amortized to date .....	8,288.60	46,968.72	
Advances on machinery orders .....	5,525.00		
Advances to contractors .....	51,000.00		
Sundry prepayments and deferred charges .....	50,509.67		
Organization expenses .....	2,090.00		
Commission on sale of shares .....	15,000.00	2,008,560.91	

\$ 8,207,202.17

#### AUDITORS' REPORT TO THE SHAREHOLDERS

We have made an examination of the books and records of Giant Yellowknife Gold Mining Company and have obtained all the information and explanations we have required.

In our opinion the above balance sheet is properly drawn up so as to exhibit a true and correct statement of the financial position of the company at the close of the year then ended, and the operations presents fairly the result of its operations for the year then ended, according to the best of our knowledge and belief.

Toronto, August 19, 1949.



# GOLD MINES LIMITED

(No Personal Liability)

— May 31, 1949

## LIABILITIES

### Current Liabilities:

Bank loans—secured .....	\$ 982,791.62	
Payrolls payable .....	27,697.79	
Accounts payable .....	248,891.78	
Income tax withheld from employees .....	6,359.19	
Provision for freight and handling on construction supplies and mine stores in transit .....	24,353.81	
Sundry accrued liabilities .....	67,140.73	\$ 1,357,234.92

### Notes Payable—due May 1, 1951—4½% interest:

Frobisher Limited .....	66,194.49	
Yellowknife Bear Mines Limited .....	66,194.49	132,388.98

### Capital and Surplus:

#### Capital Stock:

Authorized—4,000,000 shares of \$1.00 each	
Issued —3,982,550 shares .....	3,982,550.00
Add: Premium less discount on shares .....	2,567,476.10
	<hr/> 6,550,026.10

#### Under Option:

17,450 shares conditionally optioned to certain personnel, including directors, of the Company at \$5.00 each, expiring May 1, 1950, subject to approval of the shareholders in general meeting.

#### Surplus:

Net profit for year ended May 31, 1949 .....	167,552.17	6,717,578.27
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\$ 8,207,202.17

### TO THE SHAREHOLDERS

Gold Mines Limited (No Personal Liability) for the year ended May 31, 1949, and have obtained all

a true and correct view of the company's affairs at May 31, 1949, and the related statement of the best of our information and the explanations given to us, and as shown by the books of the

GUNN, ROBERTS and CO.,

Chartered Accountants.

# Giant Yellowknife Gold Mines Limited

(No Personal Liability)

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## REPORT OF THE GENERAL MANAGER

August 15th, 1949.

The President and Directors,  
Giant Yellowknife Gold Mines Limited.

Dear Sirs:

The following report on the operations of the Company for the fiscal year ending May 31st, 1949, is submitted for your consideration.

The year marked the attainment of production with the complete Treatment Plant when the roasting and cyanidation plants went into operation at the end of January. As noted in the last Annual Report, the amalgamation and flotation sections of the mill commenced operation on May 12th, 1948. For the remainder of that month, and during the first eight months of the past fiscal year, flotation concentrates were stockpiled and recovery of bullion was limited to that obtained by amalgamation. During the balance of the year, from February to May, 1949, feed to the roaster-cyanide circuit was drawn from the stockpile in addition to the flotation concentrates produced from the current tonnage milled. Overall recoveries in the Treatment Plant have continued to improve and absorption had decreased to a minimum in the last month of the period. Research work is being continued on methods of improving the overall extraction on the several types of complex ore occurring on the property.

The current milling rate will be progressively increased to the effective capacity of the present mine and treatment plants after completion of stockpile reclaiming operations later this year. At the same time, the long-range development program, described in a later section of this report, will be commenced with the sinking of No. 3 Shaft. Underground operations were concentrated at No. 2 Shaft throughout the year. Development results and the developed ore reserve position are summarized in later paragraphs under Underground Operations.

The Snare River Hydro plant of the Northwest Territories Power Commission went into operation on October 4, 1948. Prior to that date, diesel power generated at the mine was the major source of power for the Company's operations.

### TREATMENT PLANT—Recoveries and Operating Data

As previously noted, flotation concentrates were stockpiled until the roasting and cyanidation plants were completed in January. The concentrates produced during the remainder of the fiscal year were delivered directly to the roasting plant, representing about



45% of the roaster feed, the balance of 55% being reclaimed from the stockpile. Feed was delivered to the roaster on January 27th and calcine residues were first discharged from the cyanide plant on February 9th.

Dry Tons Milled.....	84,886		
Average per day.....	232.5		
Calculated Mill Heads, per ton.....	0.815 oz.	\$	28.52
Recoveries:			
(1) By Amalgamation.....	13,144.52	ozs.	
(2) In Flotation Concentrates:			
Tons Concentrates produced.....	7,770.7		
Average Grade, per ton.....	6.616 ozs.	\$	231.15
Ratio of Concentration.....	10.9 to 1		
Flotation Tailings, per ton.....	0.060 oz.	\$	2.10
Combined Extraction by Amalgamation and in Flotation Concentrates.....	93.3%		
(3) By Roasting and Cyanidation:			
From Current Concentrates.....	12,643.56	ozs.	
From Reclaimed Stock Concentrates.....	16,773.75	ozs.	
Cyanide Residues, per ton Calcine.....	0.959 oz.	\$	33.55

Due to the time interval in the roasting and cyanidation process, overall extraction results will not be available until stockpile reclaiming operations are completed later this summer. However, cyanidation recovery has continued to improve and, at the end of May, had reached the figure indicated by previous laboratory testing. This improvement has continued to date as calcine residues decreased to 0.76 oz./ton in June and 0.69 oz./ton in July, and indicated overall extraction in the latter month averaged approximately 87%.

#### Summary of Recoveries

	Ounces	Gold Gross Value	Ounces	Silver Gross Value
From Current Production....	25,788.08	\$ 902,582.90	8,844.98	\$ 6,345.87
From Stock Concentrates....	16,773.75	587,081.33	7,628.13	5,472.84
Total Recoveries .....	42,561.83	\$ 1,489,664.23	16,473.11	\$11,818.71
Gross Value of Production		\$1,501,482.94		

#### UNDERGROUND OPERATIONS

Underground work was concentrated at No. 2 Shaft where development was continued on all levels from the first to the fourth, and stope preparation and mining were carried out in the High-grade and the North ASD Zones above the second and third levels.

#### Development

The following is a summary of the development work accomplished at this shaft to the end of the fiscal year.

		During Year Ending May 31/49	Total to May 31, 1949
No. 2 Shaft			
Shaft Sinking .....	(ft.)	-----	780
Station Cutting .....	(cu. ft.)	364	43,902
Loading Pockets .....	(cu. ft.)	-----	13,260
Sumps .....	(cu. ft.)	13,683	25,956

Drifting .....	(ft.)	1,765	4,806
Crosscutting .....	(ft.)	2,063	4,345
Raising—Development .....	(ft.)	1,097	2,272
Stope .....	(ft.)	328	328
Box Holes .....	(ft.)	2,423	3,853
Slashing .....	(cu. ft.)	64,920	116,240
Underground Diamond Drilling .....	(ft.)	25,565	48,053
Surface Diamond Drilling (# 2 Shaft only) .....	(ft.)	5,620	-----

In No. 1 and No. 2 Ore Shoots, diamond drilling was carried out from the surface and the first level to define the orebodies above the latter horizon. No. 1 Shoot was opened by drifting on the third level with excellent results and raising to the second level confirmed the high grade average obtained in the drifting. Cross sectional drilling to the east of the third level drift disclosed a low-angle ore shoot, related to No. 1 Shoot, on which drifting to date has opened ore of good grade. On the fourth level, drifting is being carried to the north to investigate this orebody at that horizon.

In the North ASD Zone, additional ore was developed on the third level and preliminary work on the fourth level has indicated narrow lenses of moderate grade. Recent drilling below the fourth level has confirmed the presence of substantial orebodies indicated in earlier surface drilling. The deepest intersection (900 feet below surface) to date at the property was obtained in June, 1949, in a hole drilled from the third level, in which a core length of 5 feet averaged 2.09 ozs./ton.

#### Production

Stope preparation was completed in six stopes in Nos. 1 and 2 Ore Shoots above the second level, and mining was in progress at the end of the year. The northern section of No. 1 ore shoot on the second level was slashed to full width in high grade ore. In the North ASD Zone, stope preparation was completed and mining was under way above the second level and the southern portion of this orebody above the third level was prepared for mining.

During the year, 84,886 tons of ore were milled, of which 76,993 tons were obtained from stoping and development at No. 2 Shaft and 7,893 tons were loaded from No. 2 Ore Dump. It is interesting to note the close check between the mine and mill sampling of the tonnage delivered to the mill,—averages for the fiscal year being 0.803 oz./ton in mine sampling as compared with ball mill feed samples of 0.819 oz./ton and calculated mill heads of 0.815 oz./ton.

#### Ore Position

Developed ore reserves above the third (425) level at No. 2 Shaft were increased by 150,000 tons to the present estimate of 675,000 tons averaging 0.65 oz./ton, after replacing 77,000 tons hoisted during the year. Broken ore reserves, which are included in the foregoing estimate, were built up to 43,000 tons averaging 0.75 oz./ton at the end of the year.

For purposes of record, the following summary of ore estimated from the original surface diamond drilling program is shown below:—

	Tons Including 20% Dilution	Grade	
		Uncut (Oz./ton)	Cut (Oz./ton)
No. 1 Shaft Area .....	1,105,000	0.32	0.27
South ASD Zone .....	690,000	0.28	0.25
No. 2 Shaft Area .....	1,240,000	0.57	0.43
	3,035,000	0.41	0.33

As noted above, 675,000 tons, in addition to the tonnage milled during the year, have been developed in the No. 2 Shaft area.



### Development Program

Plans have been drawn up for a long range development program which will be carried out in successive stages to explore the full potentialities of the property. Sinking of No. 3 Shaft to a depth of 1,000 feet is the initial stage in this program. This opening is adjacent to the crushing plant and is planned as the main production shaft later. All equipment for the sinking operation is now on the property and the necessary surface plant construction is in progress.

When sinking is completed, lateral development will be carried out on several levels to develop the South and Central ASD Zone and to open up the North ASD Zone on the 725 horizon in the No. 2 Shaft area. A further stage will be lateral development south to the No. 1 Shaft area and connection with these workings through the 575 level. This major program will give access to the favourable structure between the south boundary of the property and the northern portion of the No. 2 Shaft area and will permit effective exploration throughout this entire area.

### CONSTRUCTION

The major plant projects carried out during the year were the erection of the Roasting Plant, installation of the Cyanidation section in the mill, and construction of a mill addition to house a new Flotation Feed thickener. The second bank of cells was installed in the flotation section of the mill. Additional pipe boxes were built from the mill to serve the Roasting Plant and No. 2 Shaft. Three prefabricated, steel-frame buildings were erected; two of rectangular, aluminum-sheathed design being used for the Refinery and for Explosives storage, and the other of the Quonset type for Reagents storage.

At No. 2 Shaft, a third air compressor, which brings total capacity to 2250 c.f.m., was installed in an addition to the Hoistroom. The change house was also enlarged. Rock filled dams were built in a suitable area north of the shaft to impound cyanide tailings in anticipation of the development of an economical process of re-treatment in the future.

At No. 1 Camp, additional housing was erected, including a single-wing bunkhouse accommodating 52 men, and two duplex residences. Fire protection services were extended to the new buildings and there are now fifteen fully-equipped hydrants on this system. One single and two duplex houses were built on the townsite at Yellowknife so that the Company now owns four duplexes and two single residences in Yellowknife which are rented to employees.

Spruce lumber and timber for construction and mine use were obtained from the sawmill of Resdelta Timber Ltd. south of Great Slave Lake, in which the Company has a fifty percent interest. With this exception, all machinery and equipment, building materials and consumable supplies are freighted by river from the railhead at Waterways, a distance of 600 miles. For the roaster hearths, approximately 600 tons of fire and insulating brick were transported over this route, and a total of over 6,000 tons of freight, including all the plant equipment, was delivered to the property over this route during the past two fiscal years. In addition, one and one-quarter million gallons of diesel and bunker heating oil, amounting to 5,500 tons, were transported by barge from Norman Wells, a distance of 700 miles, in the same period.

### Operating Costs

While the period under review represents the first official year of production, operations were not sufficiently stabilized to provide normal cost experience. The average milling rate throughout the year was about one-half the designed capacity of the Treatment Plant and

expensive diesel power was used for the first four months of the year. Stockpiling and reclaiming of flotation concentrates presented unusual problems involving additional costs, particularly during the severe winter weather when reclaiming operations were commenced. In the mine, work was concentrated on the advance development and stope preparation required for the increased milling rate planned for the new fiscal year, and substantial broken ore reserves were built up during the first year of mining. Hydro power, which became available in October, is a major cost factor which was particularly high as a result of the comparatively low milling rate during the first year of operation. In view of their importance, the arrangements made for the supply of power and the effect on present and future operating costs, are reviewed in the following paragraph.

A long-term contract was arranged with the Northwest Territories Power Commission which ensures the future power requirements of the Company on an expanding scale. One of the conditions accepted by the Company in 1946, when the Dominion Government agreed to develop the Snare River project, was that the Company would pay for a minimum of 2,000 horse-power years for the first year from the date of completion, and 2,500 horse-power years thereafter during the contract period. Power requirements for the operation during the seven months of the fiscal year (November 1, 1948, to May 31, 1949) that the contract was in force were substantially less than had been anticipated in 1946, as actual consumption averaged 1375 H.P. (including secondary power for heating of 300 H.P.) as compared with the minimum contract quantity of 2,000 H.P. Thus, at \$100.00 per H.P. Year ( $1\frac{1}{2}\phi$  per K.W. Hour), actual power cost for the seven months' period was \$116,600.00, or \$2.37 per ton milled, of which \$37,300.00, or \$0.76 per ton milled, represents power paid for but not used. The cost of the unused power is shown as a separate item of operating costs in the accompanying Statement of Operations, but this expense has, of course, been charged to production costs during the fiscal year.

The working force averaged 265 for the year, including 65 men directly on construction. Labour turnover continued at a costly rate, averaging 33 hired and 32 leaving employment each month. The cost to the Company during the year for transportation of personnel from and to Edmonton, a distance of 700 air miles, amounted to \$33,500.00, or 40 cents per ton milled.

It is anticipated that operating costs per ton will be substantially reduced when the milling rate is increased after completion of stockpile reclaiming operations. Unit costs for heating, boarding house loss, air transportation and overhead will decrease with the larger tonnage factor. Interest on bank loans, which amounted to 81 cents per ton milled during the year, is progressively decreasing as these loans are repaid. Completion of the major construction program, and any improvement in the stability of labour, will be reflected to an important degree in operating costs.

The support of the President and Directors, and the cooperation of the staff and General Roll employees, are gratefully acknowledged.

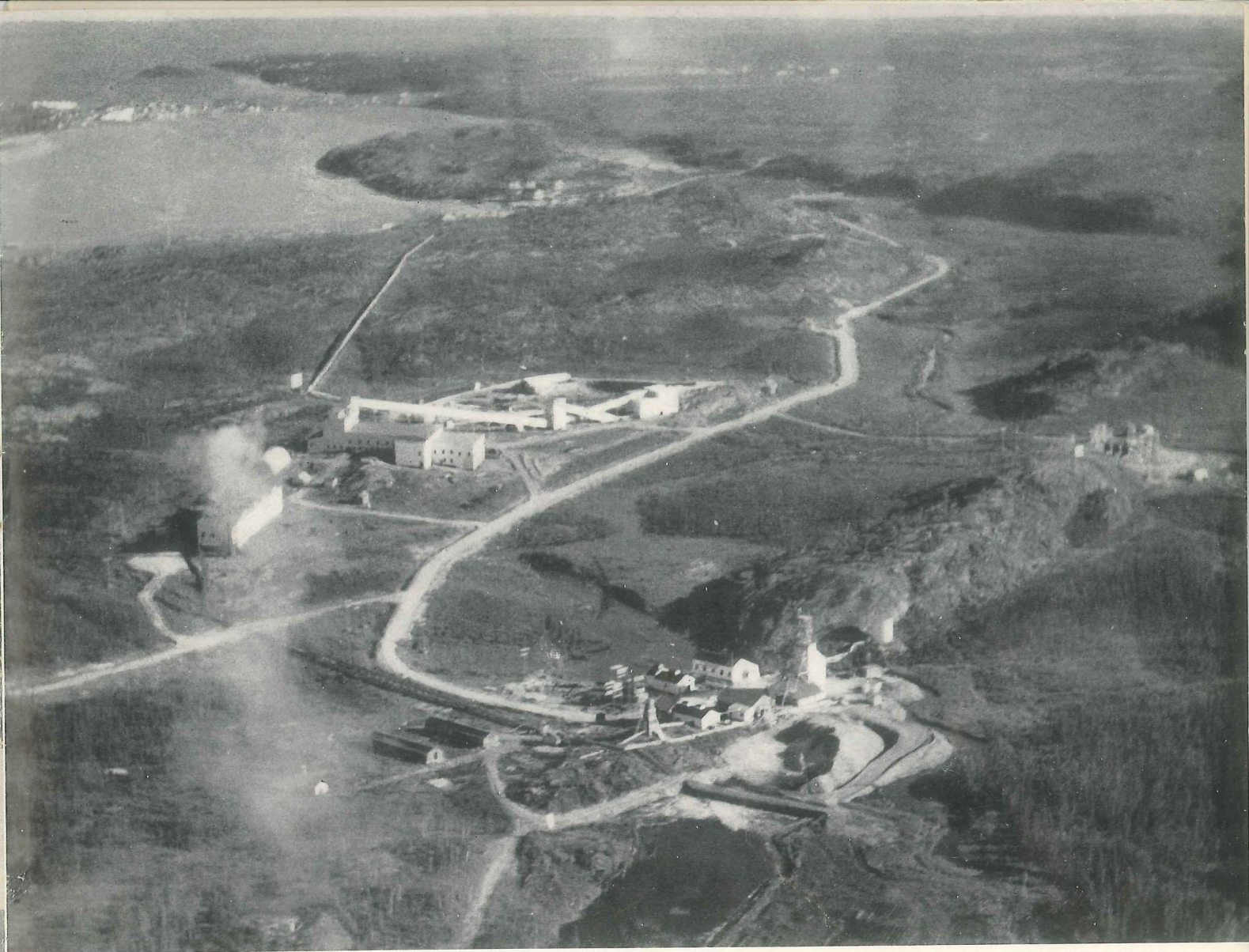
Yours very truly,

A. K. MUIR,

General Manager.

Yellowknife,  
Northwest Territories.





PHOTOGRAPHS COURTESY JOHN RENNIE, YELLOWKNIFE.

Aerial view showing No. 2 shaft in foreground, treatment plant and sub-station in centre. No. 1 Camp and Yellowknife Townsite showing in top background. West Bay fault escarpment in right background.

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